Traditional agroforestry systems practiced in lower hills of Melghat region, Chikhaldara tehsil, Maharashtra, India

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ABSTRACT : The study was carried out during 2014-16 in four villages of lower plateau of Melghat region district Amravati, Maharashtra State, India to find out the traditional agroforestry practices and their components. The data was collected by interview method and agroforestry survey using questionnaire and observations in field with hundred percent sampling size on 1963.8 ha area. The study revealed that the farmers are practicing seven different types of agroforestry systems namely; Boundary plantation, Bund plantation, Agri-horticulture system, Agri-silviculture with scattered plantation, planting near water sources, poultry based agroforestry practices and homestead. Out of the seven agroforestry systems, six agroforestry systems namely; Boundary plantation, Bund plantation, Homestead, Agri-silviculuture with scattered plantation, plantation near water source and poultry based agroforestry practices are traditional agroforestry systems, whereas agri-horticulture practice comes under agri-silviculture system. It is observed from the study that the boundary plantation was most prominent agroforestry practices in rainfed agro-eco-system in Melghat region. Nearly 60.1 per cent of the respondents followed the boundary plantation in rainfed situation followed by agri-silviculture with scattered (15.27%) and bund plantation (14.25%) and lowest was found in poultry based agroforestry (1.74%). It is observed that agroforestry in the study area is based particularly on the natural tree occurrence. The traditional agroforestry practices to some extent have helped farmers in meeting the diverse need i.e. food, fodder, fuel wood and timber but the farmers of the area being marginal are not in position to get all their consumption needs from the farm in adequate quantities. All the systems observed do not have optimum representation of all components apart from the low yield of food, fodder and fuel wood. For making the models viable research and proper extension work is needed in the area focusing on improving the productivity of land and production as far.

Key Words: Agroforestry systems, Melghat forest, vegetation survey.